

### REMARKS

Applicants have received and carefully reviewed the Office Action mailed January 2, 2004. Claims 1-62 are pending, with claims 8, 10, 12, 17, 20-28, 36, 41, 44-52 and 54-62 withdrawn from consideration due to restriction. Reconsideration and reexamination are respectfully requested.

Before addressing the substantive rejections, Applicants note that a Form PTO-1449 filed with an Information Disclosure statement received (as noted by stamped return postcard) by the PTO on January 8, 2002 has not been initialed and returned. The IDS was mailed by Applicants on November 26, 2001. Applicants remind the Examiner of the mandatory language of MPEP 609.III.C(1):

The examiner will inform applicant that the information has not been considered and the reasons why by using form paragraph 6.49 through 6.49.09.

Also, MPEP 609.III.C(2):

The information contained in information disclosure statements which comply with both the content requirements of 37 CFR 1.98 and the requirements of, based on the time of filing the statement, of 37 CFR 1.97, will be considered by the examiner.

Applicants previously requested that the IDS be considered and the associated Form PTO-1449 be returned, or that Applicants be notified of any deficiency, in an Office Action dated April 1, 2003. In accordance with MPEP 609.III.C(1) & (2), the Form PTO-1449 should have been returned, or an explanation provided with the Office Action.

Applicants have received neither an initialed Form PTO-1449, nor an explanation. Applicants are aware that there were difficulties in handling mail at the PTO during late 2001. In reviewing the IDS and comparing to the most recent Office Action, the IDS was addressed to group art unit 2877, while the most recent Office Action states a group art unit 2872. However, the filing receipt for the present application states that it is in group art unit 2877, and other papers in the Application file addressed to group art unit 2877 have made it to the Examiner, so it appears that Applicants have not erred.

In order to advance the present prosecution to issue, Applicants enclose herewith a copy of the earlier filed Form PTO-1449, the return postcard showing PTO receipt, and the three references cited in the Form PTO-1449, as substitutes, assuming the earlier filed 1449 and

references were lost by the PTO. These items are attached in an Appendix. Applicants request that the substitute copy of the Form PTO-1449 be initialed and returned to evidence that these references have been considered. If the Examiner does not feel that the above proposal would be proper, Applicants request that the Examiner contact the undersigned attorney to suggest a course of action for having these references considered. One option may be for the Examiner to make note of these references in the Office Action itself to verify that they have been considered, without providing an initialed form 1449.

In section 1 of the Office Action, the Examiner rejected claims 1-7, 9, 11, 13-16, 18, 19, 29-35, 37-40, 42, 43 and 53 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,422,483 to Ando et al. in view of U.S. Patent No. 6,571,118 to Utzinger et al., and U.S. Patent No. 5,923,036 to Tague, Jr., et al. After careful review of the cited references, Applicants respectfully disagree.

The Examiner states that Ando et al. disclose “an optical filter 4 positioned to receive light from said light source, said optical filter comprising a circular variable filter (a linear variable filter being an obvious, well known alternative to same).” However, Applicants believe this mischaracterizes element 4 in Ando et al. In particular, Ando et al. state the following:

On the side of the integrating sphere 6 from which light is made incident, there is disposed a dark vane 4 for intermittently shutting off the measuring light 18. The dark vane 4, for example, may be fan-shaped as shown in FIG. 3 and is controlled so as to be oscillated or rotated by a motor 5 as shown by an arrow, coupled with the analyzer's measuring operation. The measuring light 18 may be thereby screened, for example, such that the dark resistance or the dark current of the detector can be adjusted in the meantime. The optical system including the light source 1, the optical stop 2, the light converging optical system 3, the dark vane 4, and the integrating sphere 6 is disposed on a base 11.

Ando et al. at column 4, lines 51-63. Hence, instead of an optical filter having bandpass regions therein/thereon, the dark vane 4 is, in essence, a shutter used by Ando et al. to check the dark current of the detector. This is not an optical filter.

It appears, however, that the Examiner is suggesting replacing the dark vane 4 with an optical filter shown by Utzinger et al. This constitutes a modification of Ando et al. However, as noted by Ando et al., the use of a dark vane is needed to enable measurement of the dark current of the analyzer. Since an optical filter having bandpass regions would allow light of selected wavelengths to pass, the dark current of the detector could not be measured as called for

by Ando et al. by substituting an optical filter for the dark vane. Therefore, the proposed modification would change the principles of operation of the device of Ando et al. by preventing measurement of the dark current, a measurement that is widely understood as providing information regarding the intrinsic noise produced by a detector. A modification of a reference is improper if it changes the principles of operation of the reference device, as noted in MPEP 2143.01.

Applicants advanced this line of reasoning with respect to Ando et al. in an amendment filed April 1, 2003, and the Examiner has not specifically responded to this reasoning in either Office Action since that date. Instead, the Examiner has merely stated that new grounds of rejection rendered this argument moot. Applicants respectfully submit that reasons illustrating why a modification is improper by the terms of the modified reference cannot be overcome by providing additional references. This is particularly so when, as here, the specific reasoning is not, in fact, addressed. The Examiner appears to be using a form paragraph which includes an Examiner Note:

¶ 7.38 *Arguments Are Moot Because of New Ground(s) of Rejection*

Applicants arguments with respect to claim [1] have been considered but are moot in view of the new grounds of rejection.

**Examiner Note:**

The examiner must, however, address any arguments presented by the applicant which are still relevant to any references being applied.

Applicants' arguments have addressed a modification of Ando et al. that has been asserted three times now. Applicants respectfully submit that so long as Ando et al. continues to be cited, form paragraph 7.38 is not an appropriate response to arguments.

Applicants believe that the following comments may help advance the application to issue by providing additional grounds for understanding why the modification of Ando et al. and the cited combination are improper.

First, in reading the disclosure of Utzinger et al., Applicants note that Utzinger et al. provide a shutter separate from the filter 24. In particular: "A manual shutter (not shown) may be located between the condensing optics and monochromator 24 and may be closed to prevent fluorescence excitation light from reaching sample 60 during reflectance measurements." Utzinger et al. at column 8, lines 34-38. By suggesting a separate, manual shutter, Utzinger et al.

inherently suggest that the monochromator (filter) 24 does not perform the function of preventing light from reaching the sample 60 and, therefore, the detector.

This is in agreement with Applicants argument that the filtering monochromator does not provide the shuttering function required by Ando et al. of their dark vane. Thus the first modifying reference, Utzinger et al., appears to teach away from substituting the monochromator for a dark vane or shutter as Utzinger et al. provide their own shutter.

Second, as noted in the most recent amendment, and as acknowledged by the Examiner, it does not appear that either Ando et al. or Utzinger et al. disclose or fairly suggest an encoding unit. It appears that the Examiner sought an encoding unit in Tague et al. in order to build the references to match the claim.

With respect to the three reference combination, the Examiner states the following:

With regard to Ando et al.'s lack of teaching of an optical encoding unit positioned for encoding selected frequencies of light passing through said optical filter, wherein said optical encoding unit comprises a spatial light modulator, the teaching of just such an encoding unit by Tague, Jr. et al. (viz., spatial light modulator 14) is presented, and it is asserted that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention of the combination such that it further comprise such an optical encoding unit, for at least the purpose of altering (read: encoding), to a desired degree, frequencies of light passing through said optical filter of the spectrometer system of the combination, such that said sample be exposed to a desired frequency spectrum, and, further, such that the portion of a sample responsible for a given spectroscopic signal output by a particular detector element can be pinpointed.

Office Action, section 1 at page 5. It appears from reading this passage that the Examiner has impermissibly used Applicants' specification and claims as a template for putting together parts of the cited references.

Tague Jr., et al., suggest a spatial encoder to provide spatially non-uniform illumination allowing characteristics of distinct portions of a sample to be observed. In contrast, Applicants note the specification of Ando et al.:

An optical stop 2 is disposed at the second focus of the mirror 1a such that the size of the light flux for the rest of the optical system can be controlled by placing an opening of a selected dimension at the position of the image of the filament. Alternatively, the optical stop may be placed at a position slightly displaced from the second focus of the mirror 1a such that a slightly out-of-focus image of the filament may be used as a secondary light source. This is for the purpose of avoiding the kind of undesirable situation which may arise if the image of the filament is formed on the

surface of the sample or the diffraction grating, causing a non-uniform distribution of light intensity.

Ando et al. at column 3, line 60 to column 4, line 4. Thus, Ando et al. specifically teach away from illuminating the sample with a non-uniform light intensity distribution. The spatial encoding of Tague Jr., et al. would result in the "undesirable" (as described by Ando et al.) situation wherein incident light is spatially non-uniform. Again, the primary reference teaches away from the suggested modification.

Applicants believe that neither Utzinger et al. nor Tague, Jr., et al. can be properly combined with Ando et al. In particular, the primary reference, Ando et al., teaches away from both of the proposed modifications. Further, Utzinger et al. teach away from the substitution suggested by the Examiner. Therefore, it is believed that the cited combination cannot be relied upon to form the suggested rejection under 35 U.S.C. §103(a), and claims 1-7, 9, 11, 13-16, 18, 19, 29-35, 37-40, 42, 43 and 53 are patentable thereover.

In light of the above comments, claims 1 and 29 are believed to be in condition for allowance. Therefore it is requested that withdrawn claims 8, 10, 12, 17, 20-28, 36, 41 and 44-52 also be considered and allowed in light of their dependence from allowable generic claims.

Reconsideration and reexamination are respectfully requested. It is believed that claims 1-53 are now in condition for allowance. Issuance of a Notice of Allowance in due course is respectfully requested. If a telephone conference would be of assistance, please contact the undersigned attorney at 612-677-9050.

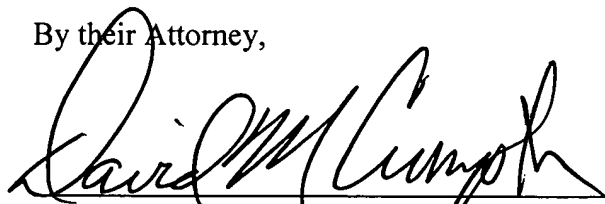
Respectfully submitted,

Robert K. Rowe et al.

By their Attorney,

Date: \_\_\_\_\_

3/29/04



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Attachment: Copy of IDS originally filed November 26, 2001



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Robert K. Rowe et al.

Serial No.: 09/832,631

Examiner: Unknown

Filed: April 11, 2001

Group Art Unit: 2877

For: ENCODED VARIABLE FILTER SPECTROMETER

Docket No.: 1023.1123101

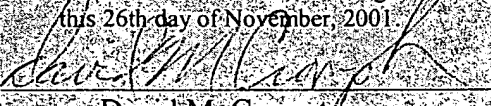
COPY

## TRANSMITTAL SHEET

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

**CERTIFICATE UNDER 37 C.F.R. 1.8:** I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on this 26th day of November, 2001.

By   
David M. Crompton

We are transmitting herewith the attached:

☐ Amendment

☐ No additional fee required

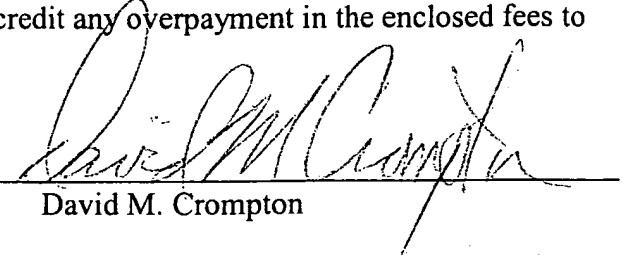
☐ The fee has been calculated as shown:

CLAIMS AS AMENDED							
	(3)	(4)	(5)	SMALL ENTITY		OTHER	
	REMAINING CLAIMS	HIGHEST PAID	EXTRA	RATE	ADD'L FEE	RATE	ADD'L FEE
TOTAL CLAIMS	-	=		X9=	\$	X18=	\$
INDEPENDENT CLAIMS	-	=		X40=	\$	X80=	\$
( ) FIRST MULTIPLE DEPENDENT CLAIM				+135=	\$	+270=	\$
TOTAL				\$		\$	

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- [ ] A check in the amount of \$\_\_\_\_\_ is enclosed.
- [ ] Small entity status of this application under 37 C.F.R. 1.9 and 1.27 has been established by verified statement previously submitted.
- [ XX ] Other: SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT, FORM PTO-1449 AND CITED REFERENCES.
- [XXXX] Please charge any deficiencies or credit any overpayment in the enclosed fees to Deposit Account No. 50-0413.

By:

  
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Re Application of:

Robert K. Rowe et al.

Serial No.: 09/832,631

Examiner: Unknown

Filed: April 11, 2001

Group Art Unit: 2877

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

<p><b>CERTIFICATE UNDER 37 C.F.R. 1.8:</b> I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231, on this 26th day of November, 2001.</p> <p>By <u>David M. Crompton</u> David M. Crompton</p>
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Dear Sir:

Pursuant to the obligations of candor and good faith imposed by 37 C.F.R. 1.56, the documents listed on the attached PTO-1449 are hereby disclosed.

No representation is intended to be made hereby that any of the cited references establishes, by itself or in combination with other information, a prima facie case of unpatentability of any claim of the present case.

Respectfully submitted,

Robert K. Rowe et al.


By their attorney,

Dated: 11/26/01

David M. Crompton

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<b>FORM PTO-1449</b>		Atty. Docket No.: 1023.1123101	Serial No.: 09/832,631
 DISCLOSURE STATEMENT		Applicant: Robert K. Rowe et al.	
		Filing Date	Group Art:
		April 11, 2001	2877

### U.S. PATENT DOCUMENTS

Examiner Initial	Document No.	Date	Name	Filing Date If Appropriate
AA	6,191,860	02/20/2001	Klinger et al.	
AB	6,192,261	02/20/2001	Gratton et al.	
AC	6,236,047	05/22/2001	Malin et al.	

### FOREIGN PATENT DOCUMENTS

Document No.	Date	Country	Translation Yes No

### OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)


EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



This will hereby acknowledge receipt of the following documents by the Assist. Comm. of Patents and Trademarks:

Transmittal Letter, Supplemental Information Disclosure Statement, Form PTO-1449 and cited references

with respect to the following:

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